

Online Teaching & Learning in Education: A Review

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ABSTRACT

The architecture of a learning system implies a heavy undertaking for e-learning to be integrated into a complicated system that is flexible, time scalable, and capable of enduring, even however there are numerous diverse devices. Currently, higher education is experiencing a significant change, considering increased accessibility. Therefore, the review plans to identify the advantages and disadvantages of e-learning in university education. A descriptive report design was used to haphazardly select students from university, who were enrolled in academic year. It is essential for potential e-learners to understand the differences between an e-learning homeroom setting and a conventional study hall setting as there are the two advantages and disadvantages of e-learning to the two environments that can presumably influence their overall performance as a student.

Keywords: Advantages, Disadvantages, E-learning, University Education.

INTRODUCTION

The spread of Coronavirus has led to the closure of educational foundations everywhere. This tested the preparedness of universities to deal with an emergency that requires the help of advanced technology including hardware and software to enable effective online learning. Such closure accelerated the development of the online learning environments so that learning wouldn't be disrupted. Numerous organizations have become interested in how to best deliver course content online, engage learners and lead assessments. Hence, Coronavirus while being a risk to humankind, has evolved establishments to invest in online learning [1].

Online learning systems are web-based software for appropriating, following, and overseeing courses over the Internet. It involves the implementation of advancements in technology to direct, design and deliver the learning content, and to facilitate two-way correspondence between students and faculty. They contain features, for example, whiteboards, discussion boards, surveys, quizzes, conversation gatherings and surveys that permit educators and students to communicate online and share course content side by side. These can offer productive and convenient ways of achieving learning objectives. The foundations are utilizing Microsoft Teams, Google meet, Edmodo and Moodle as learning management systems alongside their applications for video conferencing. Other generally used video conferencing arrangements include Zoom, Skype for business, WebEx and Adobe connect etc [2].

As per literature review, three previous studies were found, supporting online learning. The two studies at Dow University of Health Sciences, Karachi and Lahore Medical and Dental College, Lahore reported high student fulfillment with online learning modalities. The review from Khyber Pakhtunkhwa assessed the feasibility of online learning among students, trainees and employees. They reported great technology access, online abilities, and preparedness for online conversations among members across the medical education continuum [3].

With the increase being used of online modalities during Coronavirus, it is necessary to assess their effectiveness with regards to teaching and learning from different stakeholders. Therefore, the current review explores the perception of employees and students regarding the advantages, impediments and recommendations for online learning. The review is timely as Higher Education Commission (HEC) is currently implementing online learning across every one of the universities. The discoveries will help identify the required changes on need premise to make it more commonsense and worthwhile [4].

ONLINE EDUCATION: ARCHITECTURE

The objective of teaching might differ with the sort of students we are dealing with. The primary point of teaching at the school level is to provide knowledge and learning whereas higher education is to encourage students for self-learning, a

professor will just guide them on the given subject. Online education is the knowledge transfer process from a teacher to students on an online stage instead of actual homerooms [5].

THE ARCHITECTURE OF ONLINE EDUCATION

- **Teacher-** Teachers and schools have to choose an online platform to deliver lectures. Now, the teacher has to wisely prepare their e-lecture to deliver during the online class.
- **Online platforms-** Various platforms such as YouTube, Zoom and many others are technology at its best. Such online platforms are being used to deliver live sessions to students. These platforms are providing a way by which we not only present a lecture online but can set up virtual classrooms. Many of these platforms are free while some are paid.
- **Students-** The students have to understand the online platform and get familiar with it so that they can make the best use of it and join the teacher during the lecture. Students are asked to use an online platform to join the teacher in the virtual classroom [6].

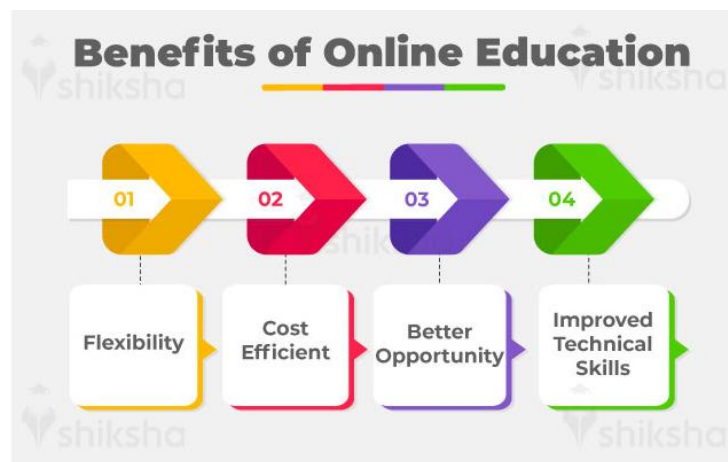


Figure 1: Benefits of Online Education

ADVANTAGES OF ONLINE TEACHING AND LEARNING

1. Less in cost

The best part of this online learning is it is much more affordable compared to old-fashioned learning. In digital classes, parents are free to buy uniforms or spend travelling expenses and can save extra money. Due to this advantage of online education, economically weaker students can fulfill their dreams. You should pay for university credits and save a lot of money with digital classes [7].

2. Time-Saving

In online classes, there is no commute included as a student can learn and get a degree while sitting at the comfort of their home.

3. Tech-savvy

As you are using technology for learning so you can become tech-savvy by digital learning. Yet, this is a good thing as in today's age of technology most of the jobs require tech-savvy employees [8].

4. Easy attendance

Students can give their attendance right from the comfort of their homes. So they can attend all online classes without any absence [9].

5. Self-paced

Digital learning is often self-paced where you can do your work in your own time, unlike traditional classes. If there are no teachers, so you can easily take your own leisure time in finishing your work.

6. Less competition & Less intensity

As you see there can be less intense and less competition in online learning compared to traditional classes. You have to memorize that the low level of competition makes students less stressed and more relaxed.

7. Improves time management

A student has to learn how to manage their time efficiently. Digital classes make this possible as there are no teachers to guide the students physically in doing their work. This independence allows students to grow and improve their time management abilities.

8. More accessible

Location-wise digital education is much more accessible. If a student wants to study at a particular university from another country or region but cannot travel due to financial issues or some restrictions, then through digital education a student can get a degree from that particular university without having to travel [10].

DISADVANTAGES OF ONLINE TEACHING AND LEARNING

1. Lose Concentration

Without having proper care for students while online classes by teachers they can easily lose focus on studies. Also, virtual classes can be done through phone or laptop gadgets where students can easily move to games or videos or YouTube for entertainment. This completely makes them go off track from subject studies [11].

2. Health Issues

Many parents are worried about their child's health as it is unhealthy to sit for hours in front of a computer screen. Looking at the screen for too long can also damage their eyesight. Not only that, back problems due to incorrect sitting positions may arise.

3. Expensive

We know that you have been confused after seeing this disadvantage. As we have said earlier that it is less in cost but it is also expensive for economically weaker students. Parents who are jobless due to covid can not afford smart phones or computers for students' online learnings. In such cases, digital learning may be accessible but it's not readily affordable.

4. Lack of socializing skills

As there is no socializing included in digital learning several students who study through digital mode can not acquire socializing skills. Also, it may lead to a decrease in the cooperative skills of a student [12].

5. Isolation

While digital education has its perks many students feel a sense of isolation and become depressed. This is due to little to no human contact and socializing with peers. Both students and teachers alike are prone to loneliness in virtual learning.

6. Limited

Digital learning does not apply to all disciplines and subjects. Areas that require practicals like engineering, medical science, and other STEM subjects cannot be implemented fully with digital classes. Moreover, some practicals cannot be learned virtually.

7. Lack of Good Internet connection

As we all know that online classes/learning are more flexible and accessible from anywhere conveniently with the help of a good internet connection. If you are failed to connect your phone or computer with good internet connectivity then you may miss a lot of important stuff because of buffering. Also, for a good internet connection parents need to spend money on a monthly or yearly basis which is a disadvantage for poor and middle-class families.

8. Prevention of cheating is difficult

Unlike traditional learning where teachers can personally monitor students. Digital Online Classes make it quite difficult for teachers to assess their students during exams. The teachers will have no idea if students cheat on the test or not as they are not physically there to assess them [13].

Table 1: Comparison table for advantages & disadvantages of online teaching & learning [14]

Advantages	Disadvantages
Increased convenience and flexibility	Lack of practice-based learning
Builds confidence in a child	Difficulty in adapting
Improved employee knowledge	Less personal
Ease of content update	Too much time spent in front of a computer screen may be harmful
Interactive session	Not easily accessible
Reduced costs	Not suitable for every topic
A huge variety of options	Reliance on technology
Less Intensity	Excess exposure to screen time
The comfort of your Home	Requires self-discipline and time management skills Diminished social interaction
Easier Attendance	Lack of trust between teacher and students

Discover Everything to Know About Online Education

One of the most frequently used terms after the pandemic is the term "new typical." The new ordinary in education is the increased use of online learning devices. The Coronavirus pandemic has triggered new approaches to learning. From one side of the planet to the other, educational organizations are looking toward online learning stages to continue with the process of educating students. The new typical now is a transformed concept of education with online learning at the core of this change. Today, computerized learning has emerged as a necessary resource for students and schools from one side of the planet to the other. For the vast majority educational institutes, this is an entirely new method of education that they have needed to take on. Online learning is presently applicable to learn academics as well as it likewise extends to learning extracurricular activities for students also. In recent months, the demand for online learning has risen fundamentally, and it will continue doing as such from now on [15].

Similarly as with most teaching methods, online learning likewise has its own set of positives and negatives. Decoding and understanding these positives and negatives will help institutes in creating strategies for more efficiently delivering the lessons, ensuring a uninterrupted learning journey for students [16].

CONCLUSION

E-learning is an effective device to transfer knowledge and it has the potential for overtaking the conventional teaching method. E-learning preparing help learners and teachers in educational environment. Students' needs are becoming need for teachers and; in this way, universities and colleges are implementing e-learning system in their own preparation programs. Through the review discoveries, it has been identified that e-learning has been advantageous to its users in numerous ways. One of the most predominant characteristics of e-learning is that it ensures ease of correspondence between teachers and students, and contributes in developing students' abilities.

It further contributes in giving scientific material to students in an interesting manner. As opposed to this, elearner has developed negative influence on students as it promotes social separation due to increase in screen time.

The review has concluded that students prefer to use e-learning since it provides chances to enhance their learning and increase their abilities. Running against the norm, the help of e-learning isn't adequate for guaranteeing the advantages for effective learning students to interact with their fellowship and mentors during their academic year socially. Specifically, there is a genuine need for a well-established e-learning environment, which learners and teachers can rely on. E-learning will become more famous to make the users feel secure and comfortable with the complement of teachers and mentors. Future studies are required on a larger scale, including extra online courses, professors, and students to better assess the advantages, disadvantages, and useful strategies of successful students.

REFERENCES

- [1]. Kumar SC. Awareness, benefits and challenges of e-learning among the students of Kurukshetra University Kurukshetra:A study. *Int J Inf Dissemination Tech.* 2019;8(4):227–230. doi:10.5958/2249-5576.2018.00048.1.
- [2]. Keis O, Grab C, Schneider A, Ochsner W. Online or face-to-face instruction?A qualitative study on the electrocardiogram course at the University of Ulm to examine why students choose a particular format. *BMC Med Educ.* 2017;17(1):194. doi:10.1186/s12909-017-1053-6.
- [3]. Thanji M, Vasantha S. ICT factors influencing consumer adoption of ecommerce offerings for education. *Indian J Sci Tech.* 2016;9(32):1–6.
- [4]. Barbera E, Clara M. Time in e-Learning Research:A Qualitative Review of the Empirical Consideration of Time in Research into e-learning. *ISRN Educ.* 2012:2012. doi:10.5402/2012/640802.
- [5]. Jawaid M, Ashraf J. Initial experience of eLearning research module in undergraduate medical curriculum of Dow University of Health Sciences:Development and students perceptions. *Pak J Med Sci.* 2012;28(4):591–596.
- [6]. Iqbal S, Shafiq A, Iqbal N. Perceptions of undergraduate dental students towards e-Learning in Lahore Medical and Dental College. *Pak J Med Heal Sci.* 2016;10(4):1191–1193.
- [7]. Sethi A, Wajid A, Khan A. E-Learning:Are we there yet? *Prof Med J.* 2019;26(04):632–638. doi:10.29309/TPMJ/2019.26.04.3367.
- [8]. Van Teijlingen ER, Hundley V. The importance of pilot studies 2001. *Nurs Stand.* 2002;16(40):33–36. doi:10.7748/ns2002.06.16.40.33.c3214.
- [9]. Kim KJ, Jang HW. Changes in medical students'motivation and self-regulated learning:a preliminary study. *Int J Med Educ.* 2015;6:213. doi:10.5116/ijme.565e.0f87.
- [10]. Lucieer SM, Jonker L, Visscher C, Rikers RM, Lucieer SM. Self-regulated learning and academic performance in medical education Self-regulated learning and academic performance in medical education. *Med Teach.* 2016;38(6):585–593. doi:10.3109/0142159X.2015.1073240.
- [11]. Wang SL, Wu PY. The role of feedback and self-efficacy on web-based learning:The social cognitive perspective. *Comp Educ.* 2008;51(4):1589–1598. doi:10.1016/j.compedu.2008.03.004.
- [12]. Bernard RM, Abrami PC, Borokhovski E, Wade CA, Tamim RM, Surkes MA, et al. A meta-analysis of three types of interaction treatments in distance education. *Rev Educ Res.* 2009;79(3):1243–1289. doi:10.3102/0034654309333844.
- [13]. Kruger J, Dunning D. Unskilled and unaware of it:how difficulties in recognizing one's own incompetence lead to inflated self-assessments. *J Pers Soc Psychol.* 1999;77(6):1121.
- [14]. Stewart D. Classroom management in the online environment. *J Online Learn Teach.* 2008;4(3):371–374.
- [15]. Bradbury NA. Attention span during lectures:8 seconds, 10 minutes, or more? *Adv Physiol Educ.* 2016;40:509–513. doi:10.1152/advan.00109.2016.
- [16]. Oliver R, Herrington J. Teaching and learning online:A beginner's guide to e-learning and e-teaching in higher education. 2001. <https://ro.ecu.edu.au/ecuworks/6832> .